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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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47973 7590 09/05/2007 WORKMAN NYDEGGER/MICROSOFT 1000 EAGLE GATE TOWER 60 EAST SOUTH TEMPLE SALT LAKE CITY, UT 84111			EXAMINER BOUTAH, ALINA A	
			ART UNIT 2143	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/631,203	Applicant(s) BERNET ET AL.	
	Examiner Alina N. Boutah	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 40 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 40 recites the limitation "the computer readable medium" in line 14. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-32 and 35-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Microsoft White Paper: "*Enabling Quality of Service Windows Sockets-based Mission Critical Applications*" posted May 20, 1999, (hereinafter referred to as "the Microsoft White Paper").

Regarding claim 1, the Microsoft White Paper teaches a method of managing network traffic, comprising,

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receiving a request for network resources via a signaling protocol (Page 1, Integration of RSVP and DiffServ, lines 1-4: “hosts use RSVP to signal QoS requirements from one end of the network to the other”); the request including information identifying an application (Page 1, Integration of RSVP and DiffServ, lines 4-6: “devices use the signaling messages to identify what application and user is requesting QoS, the type of service being requested, and the quantity of resources being requested;” page 2, lines 10-14);

evaluating the information identifying the application against policy information (Page 1, Integration of RSVP and DiffServ, lines 4-7: “devices use the signaling messages to identify what application and user is requesting QoS, the type of service being requested, and the quantity of resources being requested...based on policies and resource availability, the QoS request is either admitted or denied”); and

determining access to network resources based on a result of the evaluation (Page 1, Integration of RSVP and DiffServ, lines 6-7: “based on policies and resource availability, the QoS request is either admitted or denied”).

Regarding claim 2, the Microsoft White Paper teaches the method of claim 1 wherein the information identifying the application includes an application identifier (Page 1, Integration of RSVP and DiffServ, lines 4-5: signaling messages).

Regarding claim 3, the Microsoft White Paper teaches the method of claim 1 wherein the signaling protocol comprises RSVP (Page 1, Integration of RSVP and DiffServ, line 1).

Regarding claim 4, the Microsoft White Paper teaches the method of claim 1 wherein determining access to network resources based on a result of the evaluation includes admitting or denying the request (Page 1, Integration of RSVP and DiffServ, lines 6-7).

Regarding claim 5, the Microsoft White Paper teaches the method of claim 1 wherein determining access to network resources based on a result of the evaluation includes returning marking information in response to the request (Page 2, Integration of RSVP and DiffServ, lines 4-6: "packets are marked with a specific DiffServ Code Point").

Regarding claim 6, the Microsoft White Paper teaches the method of claim 5 wherein the marking information represents a relative priority level (Page 1, Introduction, lines 14-15: " the network administrator can employ various QoS mechanism to prioritize access to network resources for different users and applications;" Page 2, Qualitative vs. Quantitative QoS, lines 17-18).

Regarding claim 7, the Microsoft White Paper teaches the method of claim 5 wherein the marking information includes a differentiated services codepoint (Page 2, Integration of RSVP and DiffServ, lines 4-5).

Regarding claim 8, the Microsoft White Paper teaches the method of claim 5 wherein returning marking information includes providing a DCLASS object (Page 2, Integration of RSVP and DiffServ, lines 15-16; Page 3, Code Sample Introduction, ref. no 6).

Regarding claim 9, the Microsoft White Paper teaches the method of claim 5 wherein the DCLASS object includes a differentiated services codepoint (Page 2, Integration of RSVP and DiffServ, lines 15-16; Page 3, Code Sample Introduction, ref. no 6).

Regarding claim 10, the Microsoft White Paper teaches the method of claim 1 wherein the request further includes quantitative information (page 2, Qualitative vs. Quantitative QoS, lines 1-4, and 8-10).

Regarding claim 11, this is a computer-readable medium having computer-executable instructions for performing the method of claim 1, therefore is rejected under the same recited area as claim 1.

Regarding claim 12, the Microsoft White Paper teaches a method of requesting network resources, comprising:

constructing a request message in accordance with a signaling protocol, the request message including information identifying a type thereof as qualitative, and further including qualitative information (Page 1, Integration of RSVP and DiffServ, lines 4-6: "devices use the signaling messages to identify what application and user is requesting QoS, the type of service being requested, and the quantity of resources being requested;" page 2, lines 10-14); and

sending the request message to request network resources, the request message passing through at least one network device that evaluates the qualitative information in the request message to determine access to network resources (Page 1, Integration of RSVP and DiffServ,

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lines 4-7: “devices use the signaling messages to identify what application and user is requesting QoS, the type of service being requested, and the quantity of resources being requested...based on policies and resource availability, the QoS request is either admitted or denied”).

Regarding claim 13, the Microsoft White Paper teaches the method of claim 12 further comprising, receiving a return message (Page 1, Integration of RSVP and DiffServ, lines 7-8: “notify the host of the admission control decision).

Regarding claim 14, the Microsoft White Paper teaches the method of claim 12 wherein the signaling protocol comprises RSVP (Page 1, Integration of RSVP and DiffServ, line 1).

Regarding claim 15, the Microsoft White Paper teaches the method of claim 12 wherein the qualitative information has an associated hierarchy (Page 1, Introduction, lines 13-16).

Regarding claim 16, the Microsoft White Paper teaches the method of claim 12 wherein determining access to network resources based on a result of the evaluation includes admitting or denying the request (Page 1, Integration of RSVP and DiffServ, lines 6-7).

Regarding claim 17, the Microsoft White Paper teaches the method of claim 12 further comprising, receiving a return message indicating that access to the requested resources is denied (page 4, lines 1-3).

Regarding claim 18, the Microsoft White Paper teaches the method of claim 12 further comprising, receiving a return message including marking information (Page 2, Integration of RSVP and DiffServ, lines 4-6).

Regarding claim 19, the Microsoft White Paper teaches the method of claim 18 wherein the marking information represents a relative priority level (Page 1, Introduction, lines 14-15; Page 2, Qualitative vs. Quantitative QoS, lines 17-18).

Regarding claim 20, the Microsoft White Paper teaches the method of claim 18 wherein the marking information includes a differentiated services codepoint (Page 2, Integration of RSVP and DiffServ, lines 4-5).

Regarding claim 21, the Microsoft White Paper teaches the method of claim 18 wherein returning marking information includes providing a DCLASS object (Page 2, Integration of RSVP and DiffServ, lines 15-16; Page 3, Code Sample Introduction, ref. no 6).

Regarding claim 22, the Microsoft White Paper teaches the method of claim 21 wherein the DCLASS object includes a differentiated services codepoint (Page 2, Integration of RSVP and DiffServ, lines 15-16; Page 3, Code Sample Introduction, ref. no 6).

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Regarding claim 23, the Microsoft White Paper teaches the method of claim 18 further comprising, attaching the marking information to subsequent flow (Page 1, Integration of RSVP and DiffServ, lines 7-12).

Regarding claim 24, the Microsoft White Paper teaches the method of claim 12 wherein the request message is sent towards a receiver (page 3, Application Criteria for Quantitative QoS, lines 8-10).

Regarding claim 25, this is a computer-readable medium having computer-executable instructions for performing the method of claim 12, therefore, is rejected under the same cited area as stated in claim 12.

Regarding claim 26, the Microsoft White Paper teaches a method of managing network traffic, comprising:

receiving a request for network resources via a signaling protocol, the request including qualitative information (Page 2, Qualitative vs. Quantitative QoS, lines 5-11: “through extensions to RSVP signaling, Microsoft provides support for qualitative applications by enabling a new service called the ServiceTypeQualitative...”);

evaluating the qualitative information in the request against policy information (Page 2, Qualitative vs. Quantitative QoS, lines 5-11: “through extensions to RSVP signaling, Microsoft provides support for qualitative applications by enabling a new service called the ServiceTypeQualitative...”); and

returning information based on a result of the evaluation including information that specifies to an upstream sender how to mark packets for classification thereof (Page 2, Qualitative vs. Quantitative QoS, lines 12-15: “in response, network elements do not actually allocate a specific quantity of resources to the application’s traffic, but rather assign it to a particular diffserv aggregate class”).

Regarding claim 27, the Microsoft White Paper teaches the method of claim 26 wherein the request further includes quantitative information (page 2, Qualitative vs. Quantitative QoS, lines 1-4, and 8-10).

Regarding claim 28, the Microsoft White Paper teaches the method of claim 26 wherein the information identifying the application includes an application identifier (Page 1, Integration of RSVP and DiffServ, lines 4-5).

Regarding claim 29, the Microsoft White Paper teaches the method of claim 26 wherein the request comprises an RSVP PATH message (Page 1, Integration of RSVP and DiffServ, lines 1-11).

Regarding claim 30, this is a computer-readable medium having computer-executable instructions for performing the method of claim 26, therefore, it rejected under the same cited area as stated in claim 26.

Regarding claim 31, the Microsoft White Paper teaches in a computer network, a system for providing quality of service via a signaling protocol, comprising:

a sender (host), the sender providing a message comprising qualitative information identifying an application (Page 1, Integration of RSVP and DiffServ, lines 4-6; Page 2, Qualitative vs. Quantitative QoS, lines 5-11: “through extensions to RSVP signaling, Microsoft provides support for qualitative applications by enabling a new service called the ServiceTypeQualitative...”);

a receiver, the receiver receiving the message from the sender and providing a return message in response thereto (Page 1, Integration of RSVP and DiffServ, lines 4-6: “devices use the signaling messages to identify what application and user is requesting QoS, the type of service being requested, and the quantity of resources being requested”); and

a policy enforcement device, the policy enforcement device evaluating at least one of the messages communicated between the sender and the receiver, and determining access to resources based on the qualitative information (Page 1, Integration of RSVP and DiffServ, lines 6-7: “devices use the signaling messages to identify what application and user is requesting QoS, the type of service being requested, and the quantity of resources being requested...based on policies and resource availability”).

Regarding claim 32, the Microsoft White Paper teaches the system of claim 31 wherein the information identifying the application includes an application identifier (Page 1, Integration of RSVP and DiffServ, lines 4-5).

Regarding claim 35, the Microsoft White Paper teaches the system of claim 31 wherein the signaling protocol comprises RSVP (Page 1, Integration of RSVP and DiffServ, lines 1-11).

Regarding claim 36, the Microsoft White Paper teaches the system of claim 31 wherein the policy enforcement device determines access to resources by adding marking information to the return message (Page 2, Integration of RSVP and DiffServ, lines 4-6).

Regarding claim 37, the Microsoft White Paper teaches the system of claim 36 wherein the marking information represents a relative priority level (Page 1, Introduction, lines 14-15; Page 2, Qualitative vs. Quantitative QoS, lines 17-18).

Regarding claim 38, the Microsoft White Paper teaches the system of claim 36 wherein the marking information includes a differentiated services codepoint (Page 2, Integration of RSVP and DiffServ, lines 4-5).

Regarding claim 39, the Microsoft White Paper teaches the system of claim 36 wherein returning marking information includes providing a DCLASS object (Page 2, Integration of RSVP and DiffServ, lines 15-16; Page 3, Code Sample Introduction, ref. no 6).

Regarding claim 40, the Microsoft White Paper teaches the system of claim 6 wherein the DCLASS object includes a differentiated services codepoint (Page 2, Integration of RSVP and DiffServ, lines 15-16; Page 3, Code Sample Introduction, ref. no 6).

Regarding claim 41, the Microsoft White Paper teaches a computer-readable medium having a data structure for communicating network quality of service information on a network, comprising, a first field including a message header identifying a message in a signaling protocol, a second field identifying the message as having qualitative information associated therewith, and a third field including at least one set of qualitative parameters (page 1, Integration of RSVP and DiffServ, lines 1-12 – page 2, Integration of RSVP and DiffServ, lines 1-19).

Regarding claim 42, the Microsoft White Paper teaches the computer-readable medium of claim 41 wherein the data structure is provided in an RSVP message from a sender (page 1, Integration of RSVP and DiffServ, lines 1-12 – page 2, Integration of RSVP and DiffServ, lines 1-19).

Regarding claim 43, the Microsoft White Paper teaches the computer-readable medium of claim 41 wherein the computer-readable medium comprises a data transmission medium (page 1, Integration of RSVP and DiffServ, lines 1-12 – page 2, Integration of RSVP and DiffServ, lines 1-19).

Regarding claim 44, the Microsoft White Paper teaches the computer-readable medium of claim 41 wherein one of the parameters in the third field corresponds to information identifying an application (page 1, Integration of RSVP and DiffServ, lines 1-12 – page 2, Integration of RSVP and DiffServ, lines 1-19).

Regarding claim 45, the Microsoft White Paper teaches a computer-readable medium having a data structure for communicating network quality of service information on a network, comprising, a first field identifying the message as having qualitative information associated therewith, and a second field including marking information corresponding to the qualitative information (page 1, Integration of RSVP and DiffServ, lines 1-12 – page 2, Integration of RSVP and DiffServ, lines 1-19)..

Regarding claim 46, the Microsoft White Paper teaches the computer-readable medium of claim 45 wherein the data structure is provided in an RSVP reservation message (page 1, Integration of RSVP and DiffServ, lines 1-12 – page 2, Integration of RSVP and DiffServ, lines 1-19).

Regarding claim 47, the Microsoft White Paper teaches the computer-readable medium of claim 45 wherein the marking information represents a relative priority level (Page 1, Introduction, lines 14-15; Page 2, Qualitative vs. Quantitative QoS, lines 17-18).

Regarding claim 48, the Microsoft White Paper teaches the computer-readable medium of claim 47 wherein the marking information includes a differentiated services codepoint (Page 2, Integration of RSVP and DiffServ, lines 4-5).

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Regarding claim 49, the Microsoft White Paper teaches the computer-readable medium of claim 47 wherein returning marking information includes providing a DCLASS object (Page 2, Integration of RSVP and DiffServ, lines 15-16; Page 3, Code Sample Introduction, ref. no 6).

Regarding claim 50, the Microsoft White Paper teaches the computer-readable medium of claim 49 wherein the DCLASS object includes a differentiated services codepoint (Page 2, Integration of RSVP and DiffServ, lines 15-16; Page 3, Code Sample Introduction, ref. no 6).

Regarding claim 51, the Microsoft White Paper teaches the computer-readable medium of claim 44 wherein the computer-readable medium comprises a data transmission medium (page 1, Integration of RSVP and DiffServ, lines 1-12 – page 2, Integration of RSVP and DiffServ, lines 1-19).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Microsoft White Paper.

Regarding claims 33 and 34, the Microsoft White Paper teaches using a policy enforcement device for providing quality of service (page 1, Integration of RSVP and DiffServ,

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lines 2-3), but fails to specifically include a router (claim 33) or a switch (claim 34).

Nonetheless, the feature is known in the art. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to employ a switch or a router to perform the function of providing quality of service because when request messages are sent, they go through a device such as a switch or a router, which intercepts the messages and obtains signaling information in the message before allowing the messages to continue, thus enhancing security and maximizing the network's quality of service.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. USPN 6,957,255 issued to Schweitzer et al.
2. USPN 6,801,939 issued to Chafe.
3. USPN 6,154,778 issued to Koistinen et al.
4. USPN 6,003,079 issued to Friedrich et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alina N. Boutah whose telephone number is 571-272-3908. The examiner can normally be reached on Monday-Friday (9:00 am - 5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Alina Boutah
Patent Examiner
AU 2143